

**UNIVERSITI TEKNOLOGI MARA**

**ENHANCEMENT OF POSTAL CODE FOR  
ADDRESSES USING GEOCODING METHOD  
AND CODING MODEL FOR MAILING  
DELIVERY**

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Thesis submitted in fulfillment  
of the requirements for the degree of  
**Bachelor of Surveying, Science and Geomatics (Honors)**

**Faculty of Architecture, Planning and Surveying**

July 2017

## **AUTHOR'S DECLARATION**

I declare that the work in this thesis/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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		Enhancement Of Postal Code For Addresses Using
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## **ABSTRACT**

Existing postal code system in Malaysia is too general and sometimes creating a confusion, not only for the residence but also organization that use postal code for mailing delivery. The aim of this study is to enhance the existing postal code system for addresses using coding model and geocoding method for mailing development of addressing system. Mukim of Kangar, Perlis was selected to conduct this study which is involving a development of a new coding model to generate a new postal code system of this particular area. Various data such as state, district, mukim and road data have been collected together with coding model parameters which is derived from extensive literature review from postal code of other countries. By using geocoding method, all these data will be processed using ArcGIS software. The outcome of the study is proposed the postal code for mailing address.. The proposed coding model is able to generate new postal code and assist user to find a location based on postal code. This result shows the suitability of coding model to the pilot study area, Kangar, Perlis. In conclusion, the enhancement in postal code is crucial for the development of addressing system and mailing delivery. Development of Malaysia is going on and a new postal code is providing not only for mailing delivery, but also health, economic, and industrial sector as well.

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